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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,896	07/07/2003	Yvon Charbonneau	15782-2US CMB/AA/mb	4329
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OGILVY RENAULT LLP 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA			HESS, DANIEL A	
			ART UNIT	PAPER NUMBER
			2876	

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/612,896	Applicant(s) CHARBONNEAU, YVON	
	Examiner Daniel A. Hess	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to applicant's arguments and amendment made 4/13/2005, which have been placed in the file of record.

Response to Arguments

Applicant's arguments filed 4/13/2005 have been fully considered but they are not persuasive.

The essential argument the applicant has made is that the combination of Flint and Palmer fails to teach or fairly suggest the claimed 'reference positioning code' located at a predetermined position in a sequence of positioning codes.

The examiner disagrees and points firstly to Flint et al. (column 5, lines 4-11:

A series of bar code addresses (such as 89, 91, 92) is printed along one margin of the film and **precisely located at the same relative positions near each photographic area**. Therefore, if the bar code 92, for example, is **precisely positioned by the film transport mechanism so that a sensor is at one edge, such as 93, of the code 92, the photographic area 84 is precisely located in the viewing area or in the optical path of the reader/printer**.

Here, clearly portions of the bar code are used for the sake of reference positioning, just as has been claimed. In fact, the argument can be made that that Palmer is actually not truly

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necessary for providing reference positioning, although Palmer is helpful by showing that within the barcode are typically certain landmarks do not encode data but are just that – landmarks which define boundaries, limits, and encapsulate the barcode.

Flint further shows that a single mark bar code 89 is present; this could be seen as a kind of reference positioning code as well (column 4, lines 50-67):

The drawing has been marked at 90, by way of example, to indicate that the images on photographic area 87 are identified by the address "Book 6, Chapter 9", which is also indicated by the bar code 92 address. The letter "A" on photographic area 85 implies that chapter 9 is so large that it overflows and extends over a plurality of photographic areas. The user realizes that he must go on to another or overflow photographic area and he pushes the special "plus 1" push button 81 (FIG. 1) to cause the reader/printer to advance from photographic area 87 to overflow photographic area 85, where a **special single mark bar code 89 is encountered**. If the "plus 1" push button 81 is pushed again, the transport advances a second time, looking for **another single mark bar code**. However, this time a standard bar code 91 is found. Therefore, the second operation of the "plus 1" push button 81 causes the film to briefly rewind and to again display the initial photographic area 87 in Chapter 9. This "plus 1" process of advancing to the next or overflow photographic area, one at a time, may be repeated as often as required.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 5-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flint et al. (US 4,174,891) in view of "Width-Modulated Linear Symbolologies" (The Bar Code Book, Palmer, 3rd Ed.)

Re claims 1 and 6:

Flint et al. teaches at column 2, lines 15-30:

The reader/printer has an automatic call up feature so that any given photographic area may be selected and projected responsive to the push of a button or the operation of any other suitable switch. An electronic control circuit, such as a microprocessor automatically controls the movement of a film transport mechanism to position a selected photographic area in a viewing area.

Also figure 2, whose description below is excerpted (column 2, lines 33-38):

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FIG. 2 is a schematic layout of a web or strip of roll film, having a plurality of photographic areas, each in a microfiche format comprising an orthogonal array of images, with a special bar code printed along an edge of the film and located near the photographic area which it identifies

Column 5, lines 4-11:

A series of bar code addresses (such as 89, 91, 92) is printed along one margin of the film and precisely located at the same relative positions near each photographic area. Therefore, if the bar code 92, for example, is precisely positioned by the film transport mechanism so that a sensor is at one edge, such as 93, of the code 92, the photographic area 84 is precisely located in the viewing area or in the optical path of the reader/printer.

Column 7, lines 30-48:

The film is transported responsive to an operation of switches on control panel 52, to automatically select and display a desired photographic area. More particularly, FIGS. 5, 6 help explain how a roll of film is transported, in order to bring a selected photographic area into the viewing area in the reader/printer of FIG. 1 responsive to a reading of the bar codes of FIGS. 2-4. FIG. 5 graphically shows film 60 traveling a forward direction and FIG. 6 shows the same film 60 traveling in a reverse direction.

The memory of the last read bar code is stored, so that the reader/printer always starts in the correct direction. But, if that memory has been lost (for example, there might be a power interruption), the reader/printer starts in one preferred direction. One bar code is read, and the electronic control circuit decides whether the film is or is not traveling in the correct direction. If it is, the film continues to so travel. If not, the film transport reverses direction.

And in column 10, lines 11-12:

When the desired bar code is detected, the motor 202 is stopped.

Flint et al. fails to teach or fairly suggest the presence and use of a "start reading" code.

As Palmer shows (see figure 4-10 of The Bar Code Book, 3rd Ed.) the UPC standard bar coding system includes "two six-digit halves" in other words a data portion, "surrounded by left, center and right guard patterns." These guard patterns serve as reference markers for the overall barcode and define where it begins and ends.

In view of Palmer's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known starting marker as taught by Palmer in the bar code of Flint et al. because this can help to ensure that the system is properly calibrated as it scans the actual data portion.

Re claim 2: See figure 2, ref. 91 of Flint et al.

Re claim 3: In UPC, as described by Palmer, the end markers are a pair of narrow bars; however a single wider bar could also serve as a marker to delineate where the bar code begins. This involves an element of design choice. Also, as for the width, the "guard bars" of UPC are shown to be taller, and are thus distinguished from the surrounding bars. The fact that these bars are distinguished from the surrounding bars is the critical point, whether taller or wider.

Re claim 5: As column 5, lines 4-6 recite, "A series of bar code addresses (such as 89, 91, 92) is printed along one margin of the film and precisely located at the same relative positions near each photographic area." Thus Flint et al. teaches precise locating based on bar code position.

As for limitations on which particular bar of a barcode establishes the position, such as the fourth bar, this is a matter of design choice; for example, if it were the first bar, the fifth bar, or a set of bars, the effect would be the same. Also, as for the width, the "guard bars" of UPC are shown to be taller, and are thus distinguished from the surrounding bars. The fact that these bars are distinguished from the surrounding bars is the critical point, whether taller or wider.

Re claim 7: Page 7 of the specification appears to be the only place where BCD (binary coded decimal) is discussed. In each of the two references to BCD in that part of the

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specification, the applicant uses the term, "BCD coding scheme or one of the like"; nowhere in the instant specification is there any indication that BCD (as opposed to another bar encoding scheme) is functionally important for making the code work. Thus, the use of BCD encoding is considered a design choice.

Re claim 10: See discussion re claim 5 above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DH
6/4/05

DANIEL STCYR
PRIMARY EXAMINER

